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10/550,223	06/09/2006	William G. England	45038-320968 (PUR-0220)	7822
23370 JOHN S. PRAT	7590 03/17/201 Г <b>T. ESO</b>	EXAMINER		
KILPATRICK TOWNSEND & STOCKTON LLP			KIM, SUN U	
1100 PEACHTREE STREET SUITE 2800		ART UNIT	PAPER NUMBER	
ATLANTA, GA 30309			1777	
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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)		
Office Action Summers	10/550,223	ENGLAND, WILLIAM G.		
Office Action Summary	Examiner	Art Unit		
	JOHN KIM	1777		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
<ul> <li>1) Responsive to communication(s) filed on <u>23 December</u></li> <li>2a) This action is <b>FINAL</b>. 2b) This</li> <li>3) Since this application is in condition for allowar closed in accordance with the practice under Expression in the practice of the</li></ul>	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☑ Claim(s) 1-4,7,9,10 and 34-36 is/are pending ir 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-4,7,9,10 and 34-36 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary			
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:			

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 1-4, 9-10 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "high capacity" and "high flow" in claim 1 is a relative term which renders the claim indefinite. The term "high capacity" and "high flow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-4, 7, 9 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 3,434,479 (Till et al).

Regarding claims 1-4 and 9, Till et al disclose a solid filtration media consisting of the porous substrate of activated alumina impregnated with aqueous solution of calcium permanganate e.g. calcium permanganate and water wherein the concentration of permanganate salt in the filtration media is 18.7% by weight (see Example 1, 5<sup>th</sup>. Column of Table I; col. 3, line 59 – col. 4, line 47) or 17.0% and 22.2% by weight (see Example 4, 5<sup>th</sup> & 6<sup>th</sup> columns in Table IV; col. 5, lines 50-65) wherein the porous substrate is about 80% by weight of the filtration media. Till et al teach one or more permanganates of light metals in Group I and Group II of the

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Periodic Table (see col. 2, lines 10-21). Recitation of "the filtration media is configured to remove contaminants from a high flow air stream" is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 7, Till et al teach sodium permanganate (see Example 3; col. 5, lines 10-47; particularly, 19.4% sodium permanganate by weight in Table III).

Regarding claims 34-35, a recitation of "the filtration media is configured to remove contaminants from an air stream moving through the filtration media at a flow rate of from 10 to 750 ft/min (claim 34) or from 60 to 100 ft/min (claim 35)" is an intended use. Note that the unit is a speed measurement and not flow rate such as volumetric flow rate. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 36, the contaminants claimed to be removed has no significance in determining patentability of the apparatus claim.

"Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d \*>996<, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

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5. Claims 1-2, 7, 9 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,730,948 (Klatte et al).

Regarding claims 1-2 and 9, Klatte et al disclose a solid filtration media consisting of the porous substrate of zeolite crystals impregnated with aqueous solution of potassium permanganate e.g. potassium permanganate and water wherein the concentration of permanganate salt in the filtration media is about 1 to about 8% by weight (see col. 3, line 25 – col. 4, line 21) wherein the porous substrate is inherently between about 40 and about 80% by weight of the filtration media. Klatte et al teach one or more permanganates of light metals including sodium, magnesium, calcium, barium or lithium (see col. 3, lines 62-65).

Recitation of "the filtration media is configured to remove contaminants from a high flow air stream" is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 7, Klatte et al teach sodium permanganate (see col. 3, line 64).

Regarding claims 34-35, a recitation of "the filtration media is configured to remove contaminants from an air stream moving through the filtration media at a flow rate of from 10 to 750 ft/min (claim 34) or from 60 to 100 ft/min (claim 35)" is an intended use. Note that the unit is a speed measurement and not flow rate such as volumetric flow rate. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

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Regarding claim 36, the contaminants claimed to be removed has no significance in determining patentability of the apparatus claim.

"Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d \*>996<, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Till et al as applied to claim 1 above and further in view of England '522 (U.S. Patent No. 6,004,522). Till et al disclose the solid filtration composition as described above. Till et al further disclose that adsorbent material i.e. porous substrate (see col. 2, lines 33-52) includes bauxite, activated alumina, clay, kaolin, and silica gel (see col. 2, lines 22-25).

Claims 9-10 essentially differ from the filtration media of Till et al in reciting zeolite or zeolite-like mineral. England '522 discloses a solid filtration composition impregnated with a permanganate and water wherein a porous substrate comprising activated alumina, silica gel, zeolite, adsorbent clay, kaolin, and activated bauxite (see col. 6, lines 1-4). The claims 9-10 would have been obvious because the substitution of one known element such as zeolite for

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another porous substrate of Till et al would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

- 8. Applicant's arguments with respect to claims 1-4, 9-10 and 34-36 have been considered but are most in view of the new ground(s) of rejection.
- 9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN KIM whose telephone number is (571)272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Kim/ Primary Examiner, Art Unit 1777

JK 3/12/11